



# *CITY OF* NORTHAMPTON

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## Water and Sewer Rate Study

Preliminary Results | January 21, 2016

# **TODAY'S PRESENTATION**

## **I. Project History & Overview**

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## **II. Financial Plan Overview**

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## **III. Current Rates**

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## **IV. Preliminary Rates**

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## **V. Customer Impacts and Next Steps**

# I. PROJECT HISTORY & OVERVIEW

# RFC and W-A

- » Raftelis Financial Consultants, Inc. (RFC) has the largest consulting practice in the nation focusing on financial/rate consulting for water and wastewater utilities
- » Woodcock & Associates, Inc. (W-A) has provided water and wastewater rate consulting services to more New England utilities than any other firm
- » For nearly a decade, RFC/W-A have maintained a collaborative working relationship, which brings the depth and national presence of RFC combined with the New England expertise of W-A to assist utilities in the region with their most challenging and complex issues

# PROJECT HISTORY

- » The City asked RFC/W-A to perform a Water and Sewer rate study in order to:
  - Assess the appropriateness of the City's current rate structures in comparison to Northampton's rate structure objectives
  - Develop a forecast of water and sewer rates to fund all current and future operating and capital needs while also accomplishing the City's rate structure objectives

# RATE STRUCTURE OBJECTIVES

- » Promote conservation
- » Provide assistance to economically disadvantaged customers
- » Improve equity among customer types
- » Enhance revenue stability

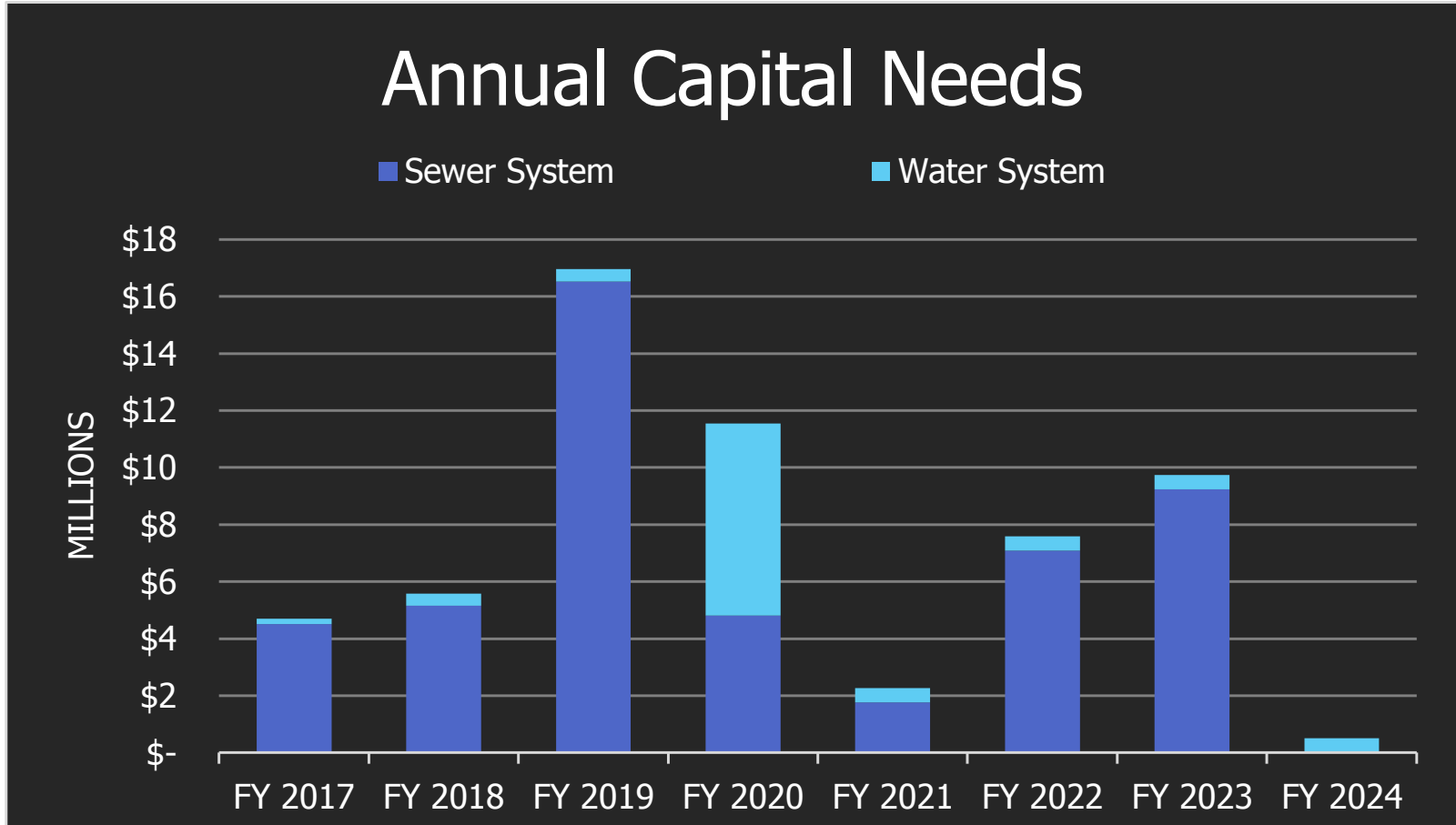
## II. FINANCIAL PLAN OVERVIEW

# OVERVIEW

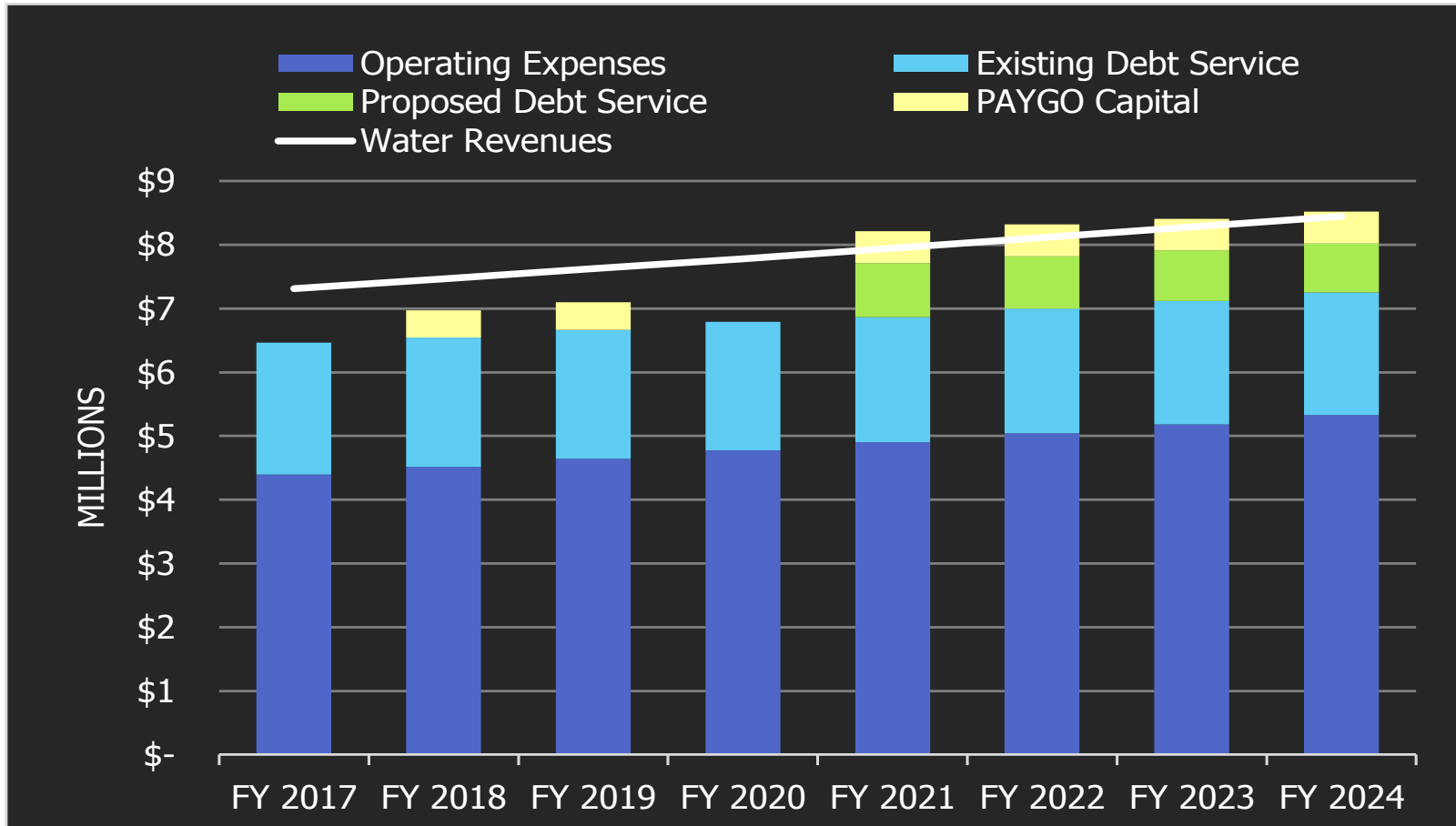
- » RFC/W-A worked closely with City to build a forecast of operating expenses, capital expenditures, and necessary funding sources
- » A mixture of rate increases, new debt service, and reserve funds were used to fund annual cash needs and minimize impacts on the City's customers



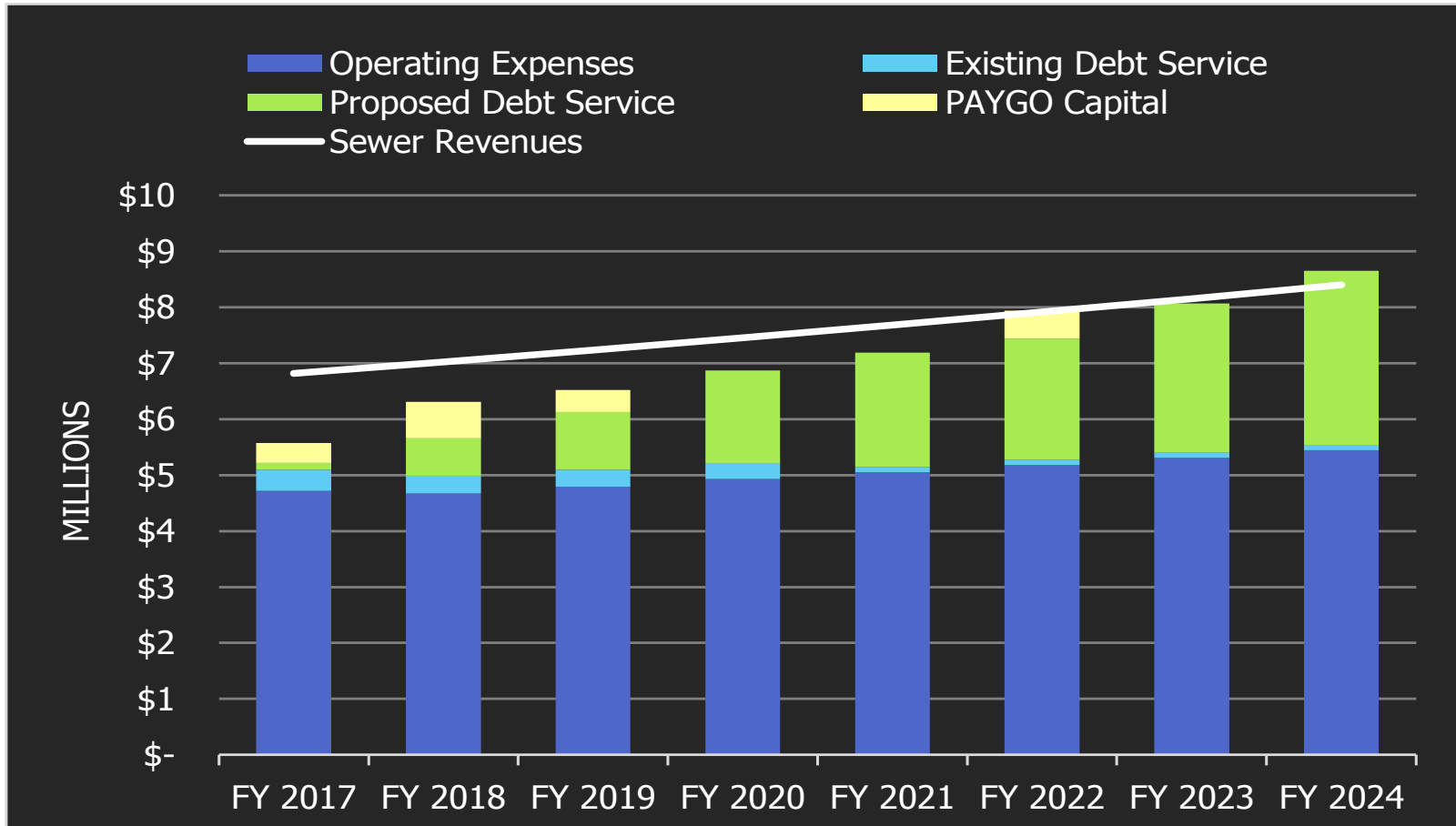
# CAPITAL IMPROVEMENTS PLAN



# WATER FINANCIAL PLAN



# SEWER FINANCIAL PLAN



# III. CURRENT RATES

# CURRENT WATER RATE STRUCTURE

- » All customers are charged the same volumetric rate regardless of type, size, or the amount of water used
- » A very small fixed charge is assessed per bill, which recovers very little of the City's fixed cost of operations
- » No private fire protection charges

# CURRENT WATER RATE STRUCTURE

Current Rates	FY 2016
<u>Volumetric – All Customers (per Ccf)</u>	
All Consumption	\$ 5.58
<u>Quarterly Fixed Charge</u>	
5/8"	\$ 1.00
3/4"	1.25
1"	1.75
1.5"	3.00
2"	5.00
3"	10.00
4"	15.00
6"	30.00
8"	50.00

# CURRENT SEWER RATE STRUCTURE

- » All customers are charged for sewer services based on 100% of metered water consumption, except for a small number of large industrial customers

Current Rates	FY 2016
<u>Volumetric – All Customers (per Ccf)</u>	
All Consumption	\$ 6.08

# IV. PRELIMINARY RATES



# ANALYZED OPTIONS

- » Seasonal rates
- » Tiered water rates
- » Fixed charges
- » Second meter policies
- » Sewer rate setting methodologies
- » Private fire protection charges

# PRELIMINARY WATER RATE STRUCTURE

- » Create 2 separate volumetric rates based on meter size
  - Small - 5/8", 3/4" and 1"
  - Large - 1.5" and above
- » Implement a two-tier system for Small customers to promote conservation
- » Cover a greater amount of fixed costs through a larger quarterly fixed charge
- » Implement private fire protection charges

# PRELIMINARY WATER RATE STRUCTURE

PRELIMINARY Rates		FY 2017
*	<u>Volumetric - Small (per Ccf)</u>	
	Tier 1: 0 - 16 Ccf	\$ 4.73
	Tier 2: > 16 Ccf	6.21
	<u>Volumetric - Large (per Ccf)</u>	
	All Consumption	\$ 6.09
	<u>Quarterly Fixed Charge</u>	
	5/8"	\$ 12.64
	3/4"	18.96
	1"	31.59
	1.5"	63.17
	2"	101.07
	3"	189.51
	4"	315.85
	6"	631.69
	8"	1,010.69

\* 16 Ccf is approximately 12,000 gallons, about 135 gal/day

# FIRE PROTECTION CHARGES

PRELIMINARY Rates (Quarterly)	FY 2017
<u>Fire Line Diameter</u>	
< 2"	\$ 0.00
2"	10.00
3"	25.00
4"	60.00
6"	170.00
8"	360.00
10"	645.00

» These charges will generate approximately \$100,000 annually

# SEWER RATE STRUCTURE

- » Charge sewer rate based on 80% of metered water consumption to reflect water not returned to sewer system
- » For the limited number of large industrial customers which have a sewer meter, charge sewer rate based on 100% of metered sewer flow.

PRELIMINARY Rates	FY 2017
<u>Volumetric – All Sizes (per Ccf)</u>	
All Consumption	\$ 7.52

# AFFORDABILITY PROGRAM

- » Customers eligible for real estate and CPA tax exemptions will be exempt from the quarterly fixed charge of \$12.64.
- » This not only reduces the customer's bill, but also removes the only portion of the bill that the customer cannot reduce through conservation

# IV. CUSTOMER IMPACTS AND NEXT STEPS

# WATER ONLY CUSTOMER IMPACTS

## (Quarterly Bill Comparison)

	Ccf	Size	Current	Preliminary	\$ Change	Preliminary (w/ income discount)	\$ Change (w/ income discount)
	3	5/8"	\$ 17.74	\$ 26.83	\$ 9.09	\$ 14.19	\$ (3.55)
	6	5/8"	\$ 34.48	\$ 41.02	\$ 6.54	\$ 28.38	\$ (6.10)
	9	5/8"	\$ 51.22	\$ 55.21	\$ 3.99	\$ 42.57	\$ (8.65)
*	12	5/8"	\$ 67.96	\$ 69.40	\$ 1.44	\$ 56.76	\$ (11.20)
	15	5/8"	\$ 84.70	\$ 83.59	\$ (1.11)	\$ 70.95	\$ (13.75)
	20	5/8"	\$ 112.60	\$ 113.14	\$ 0.54	\$ 100.50	\$ (12.10)
	50	1"	\$ 280.75	\$ 318.27	\$ 37.52	N/A	N/A
	200	2"	\$ 1,121.00	\$ 1,319.47	\$ 198.47	N/A	N/A
	500	3"	\$ 2,800.00	\$ 3,235.51	\$ 435.51	N/A	N/A
	1,000	4"	\$ 5,595.00	\$ 6,407.87	\$ 812.87	N/A	N/A
	2,000	6"	\$ 11,190.00	\$ 12,815.74	\$ 1,625.74	N/A	N/A

\* Represents typical Residential customer (12 Ccf is approximately 9,000 gallons)



# SEWER ONLY CUSTOMER IMPACTS

## (Quarterly Bill Comparison)

Ccf	80% of Ccf	Size	Current	Proposed	\$ Change
3	2.4	5/8"	\$ 18.24	\$ 18.05	\$ (0.19)
6	4.8	5/8"	\$ 36.48	\$ 36.10	\$ (0.38)
9	7.2	5/8"	\$ 54.72	\$ 54.14	\$ (0.58)
* 12	9.6	5/8"	\$ 72.96	\$ 72.19	\$ (0.77)
15	12	5/8"	\$ 91.20	\$ 90.24	\$ (0.96)
20	16	5/8"	\$ 121.60	\$ 120.32	\$ (1.28)
50	40	1"	\$ 304.00	\$ 300.80	\$ (3.20)
200	160	2"	\$ 1,216.00	\$ 1,203.20	\$ (12.80)
500	400	3"	\$ 3,040.00	\$ 3,008.00	\$ (32.00)
1,000	800	4"	\$ 6,080.00	\$ 6,016.00	\$ (64.00)
2,000	N/A	6"	\$ 12,160.00	\$ 15,040.00	\$ 2,880.00

\* Represents typical Residential customer (12 Ccf is approximately 9,000 gallons)

# COMBINED CUSTOMER IMPACTS

## (Quarterly Bill Comparison)

	Ccf	Size	Current	Preliminary	\$ Change	Preliminary (w/ income discount)	\$ Change (w/ income discount)
	3	5/8"	\$ 35.98	\$ 44.88	\$ 8.90	\$ 32.24	\$ (3.74)
	6	5/8"	\$ 70.96	\$ 77.11	\$ 6.15	\$ 64.48	\$ (6.48)
	9	5/8"	\$ 105.94	\$ 109.35	\$ 3.41	\$ 96.71	\$ (9.23)
*	12	5/8"	\$ 140.92	\$ 141.59	\$ 0.67	\$ 128.95	\$ (11.97)
	15	5/8"	\$ 175.90	\$ 173.83	\$ (2.07)	\$ 161.19	\$ (14.71)
	20	5/8"	\$ 234.20	\$ 233.46	\$ (0.74)	\$ 220.82	\$ (13.38)
	50	1"	\$ 584.75	\$ 619.08	\$ 34.33	N/A	N/A
	200	2"	\$ 2,337.00	\$ 2,522.66	\$ 185.66	N/A	N/A
	500	3"	\$ 5,840.00	\$ 6,243.49	\$ 403.49	N/A	N/A
	1,000	4"	\$ 11,675.00	\$ 12,423.82	\$ 748.82	N/A	N/A
	2,000	6"	\$ 23,350.00	\$ 27,855.62	\$ 4,505.62	N/A	N/A

\* Represents typical Residential customer (12 Ccf is approximately 9,000 gallons)

# STUDY RECOMMENDATIONS

- » Provide economic assistance to customers who qualify based on current tax exemption criteria
- » Create a two-tier water rate structure for small meters
- » Implement a larger fixed charge
- » Create new private fire protection charges
- » Bill sewer rate at 80% of metered water consumption

# NEXT STEPS

- » Finalize Study and prepare Mayor's Recommended FY 2017 Rates to City Council
- » Assist City with finalizing and implementing rates
- » Assist City with customer outreach and education on new rates

Q&A

THANK  
YOU